

# GEOGRAPHIC NEWS BULLETINS

*Published Weekly by*

## THE NATIONAL GEOGRAPHIC SOCIETY

(The National Geographic Society is a scientific and educational Society, wholly altruistic, incorporated as a non-commercial institution for the increase of geographic knowledge and its popular diffusion. General Headquarters, Washington, D. C.)

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Contents for Week of January 20, 1941. Vol. XIX. No. 26.

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*Photograph courtesy U. S. Navy Recruiting Bureau*

### THE STARS AND STRIPES GET GREEN LIGHT ON SHANGHAI STREET SCENE

Traffic lights supervised by a turbaned Sikh cop, U. S. Navy men in trench helmets, and staring Chinese clad in scant coolie simplicity—these are the contradictions offered in Shanghai, where East meets West—and clashes. Friction with Japanese garrisons and withdrawal of British forces from the city left its patrolling in the hands of Japanese and Americans, a minor one of the government changes which 1940 brought (Bulletin No. 2).

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### HOW TEACHERS MAY OBTAIN THE BULLETINS

The Geographic News Bulletins are published weekly throughout the school year (thirty issues) and will be mailed to teachers in the United States and its possessions for one year upon receipt of 25 cents (stamps or money order); in Canada, 50 cents. Entered as second-class matter, Jan. 27, 1922, Post Office, Washington, D. C., under act of March 3, 1879. Acceptance for mailing at special rate of postage provided for in section 1103, Act of Oct. 3, 1917, authorized Feb. 9, 1922. Copyright, 1941, by National Geographic Society, Washington, D. C. International copyright secured. All rights reserved. Quedan reservados todos los derechos.

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General Headquarters, Washington, D. C.

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### Inauguration Also Inaugurates Washington's Annual Tourist Trek

**V**ISITORS to the Nation's capital to attend the third inauguration of President Roosevelt are giving Washington an early taste of tourist crowds.

Government, the city's principal "industry," is also the principal tourist attraction. Even without an inauguration as a magnet, visitors crowd into the buildings on Capitol Hill to see the wheels of government turn. No record-keeping is practicable of the thousands who daily visit the Capitol by its numerous entrances, to look at the Senate Chamber, the hall of the House of Representatives, and the statuary in the Hall of Fame. But the Library of Congress, bordering on the Capitol grounds, had 1,037,558 visitors last year, and 612,319 people strolled through the marble corridors of the near-by new Supreme Court Building.

#### Giraffes, Penguins, Lincoln, and G-Men Are Attractions

Exhibits of broadest appeal are the various units of the Smithsonian Institution, which last year reported a total of 2,512,392 visitors to its cluster of museums. Most popular was the Arts and Industries Building, where sightseers paid special attention to the airplane in which Lindbergh flew the Atlantic and the collection of dresses of Presidents' wives.

Some 2,129,600 people peered into cages at the 2,500 specimens at the National Zoological Park; penguins and giraffes enjoyed particular popularity.

The classic dignity of the Lincoln Memorial, beside the placid reflecting pool, draws visitors in droves up its broad steps; 1,639,004 climbed the stairs last year. The Washington Monument at the opposite end of the reflecting pool last year welcomed more than 961,200 visitors who sought a bird's-eye view of the city. An elevator in the towering obelisk, which stands 555 feet high, ascends to the top in 1½ minutes.

Each day last year more than a thousand persons were shown the work of the Federal Bureau of Investigation, in the Department of Justice Building, with its crime laboratory, fingerprinting files, and trophies of notorious criminals.

#### Watching Millions Made Daily

Others than stamp collectors (totaling 400,000 last year) flock to the Bureau of Engraving and Printing to see the only place in the United States where postage stamps are made; for here, in addition, all the paper money of the Nation is engraved. The daily output is about 5,435,000 notes, more than half of them \$1 bills, with a total face value around \$6,839,000. Postage stamps are run off at the rate of 65,775,000 a day, enough for every man, woman, and child in the nation to buy a stamp every two days.

Many non-governmental buildings vie for the attention of visitors to Washington. Notable among these is the Washington Cathedral, which will be one of the ten largest cathedrals of the world when completed.

The Custis Mansion, later the estate of General Robert E. Lee at Arlington, overlooks the capital from a hill on the Virginia side of the Potomac. It was visited by 364,014 people in 1940. The estate is now the Arlington National Cemetery, where the Unknown Soldier of the World War is interred.

At the end of the Memorial Highway which parallels the Potomac on the Virginia side, Mount Vernon was host last year to some 800,000 visitors.

In its widely varied phases, Washington appeals to many special interests.



(c) Donald McLeish

#### NOTRE DAME HAS JUST SEEN A CLIMAX TO 777 YEARS OF CHANGE IN PARIS

Grotesque gargoyles, from the stone lacework of Notre Dame's tower balconies, have contemplated the changing face of the city for centuries. They saw bridges (left) link Notre Dame, on Paris's birthplace island in the Seine, with both river banks, when the city spread over surrounding hills. They saw the Dome des Invalides (farthest left) rise over the tomb of France's little dictator, Napoleon, and the Eiffel Tower (background) rise to blaze the way for structural steel in modern construction. In 1940 these medieval figures on one of the most famous churches in the world looked down upon the flight of the government from Paris to Vichy, as German forces moved into another of the six countries they upset in 1940 (Bulletin No. 2).

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### 1940 Toppled Kings and Governments in World-Wide Upsets

**I**N THE year 1940 were recorded probably more numerous and more far-reaching changes in the governments of the world and their control of territory than ever before occurred in a single year.

While the most spectacular events—the toppling of thrones and the rise and fall of empires—took place in the Old World, the changes which were most significant to the United States may turn out to be the taking over by 99-year lease from Great Britain of eight naval bases for Uncle Sam on outlying islands in the Atlantic and the Caribbean. The arrangement provides the United States for the first time with a fringe of protective positions that would multiply the effectiveness of the Navy and the air forces in warding off attacks from the east. In much the same category are agreements for United States use of bases in the republics of Central and South America.

#### Five and a Half Countries Taken by Germany; Six Sovereigns Affected

Over wide areas in western Europe boundary lines and forms of government that had existed for two decades, and in some cases for centuries, were virtually wiped out. Germany, expanding by force of arms, completely engulfed and took over Denmark, Norway, the Netherlands, Belgium, Luxembourg, and the greater portion of France. By treaties, by diplomatic pressure, or by garrisons of “protective forces,” Germany in addition gained varying degrees of control over the remainder of France, Spain, Romania, and Hungary.

Three sovereigns of western Europe were driven from their thrones and countries: the King of Norway, the Queen of the Netherlands, and the Grand Duchess of Luxembourg. One, the King of the Belgians, was deposed and interned; and one was left on his throne under German surveillance—the King of Denmark. Because of German pressure combined with internal disorders, a king of southeastern Europe, Carol of Romania, abdicated in favor of his son, Michael. This was the second time in 15 years that Carol had renounced the throne.

Czechoslovakia's and Poland's governments-in-exile were joined by the refugee governments of the Netherlands, Norway, and Luxembourg, with a rival “Free French” government set up in England in opposition to that at Vichy. Rulers of the Netherlands and Norway “fled” to London, while Luxembourg established her government in Montreal. Queen Wilhelmina selected Batavia, in Java, as the new Dutch Empire capital.

#### Five More Republics in Soviet Russia

As a result of the Russo-Finnish war, the U. S. S. R. absorbed from Finland the entire Karelian Isthmus, including the city of Viipuri; the Rybachi Peninsula, in Petsamo in the north; the north and west shores of Lake Ladoga; and a 7,000-square-mile strip of land in Karelia. Russia also obtained a lease on Finnish Hangoe Island as a military base. The southern territory ceded to Russia by Finland was admitted into the U. S. S. R. as the 12th republic of the Soviet Union, to be known as the Union Karelo-Finnish Socialist Republic.

Following troop movements, diplomatic action, and treaty agreements, four more republics were added to the U. S. S. R. during the summer of 1940 at the expense of Romania and the Baltic States. On June 28, Romania acceded to Russian demands by handing over Bessarabia and northern Bukovina. Northern

Bulletin No. 2, January 20, 1941 (over).



An English visitor, who had but a few hours in the capital, elected to spend that time in Rock Creek Cemetery, seeing the world-famous statue by Saint-Gaudens which commemorates the wife of Henry Adams. Some students of Robert Burns come to the capital solely to see the notable collection of Burns first editions and manuscripts in the library of the Scottish Rite Temple.

The Corcoran, Freer, and the National Art Galleries, as well as the many famous murals and mosaics in public buildings, attract thousands each year. These, with the National Gallery of Art soon to be opened, will make Washington the nation's great art center.

Note: See also "Washington by Night," *National Geographic Magazine*, April, 1940; "Secrets of Washington's Lure" (color insert), March, 1940; "Spring's Gay Bouquets Deck the Nation's Capital" (color insert), July, 1938; and "Washington, Home City and Show Place," June, 1937.

**Bulletin No. 1, January 20, 1941.**



*Photograph by Volkmar Wentzel*

#### **TOURISTS FOLLOW PRESIDENTS' FOOTSTEPS DOWN AMERICA'S MOST HISTORIC MILE**

Every inaugural parade since Thomas Jefferson's second has traversed this famous mile of Pennsylvania Avenue between the Treasury Building's gates at 15th Street, with the White House just around the corner, and the west façade of the Capitol. First laid out in its full 80-foot width in 1800-01, before a single government building was completed in the new capital "city," Pennsylvania Avenue now marks the hypotenuse for the recently constructed Federal Triangle, the largest cluster of government office buildings in the world (right background). The Old Post Office Department intrudes a granite Gothic clock tower into the Federal Triangle's solid blocks of classic architecture.

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### London's Square-Mile City Within a City

THE year-end bombing and burning of one square mile, with possibly 15,000 permanent residents, has rocked the British Empire to its roots. For that devastated mile was the City, the compact "downtown" financial district beside the Thames in the very heart of London, where historic landmarks were barely a yard apart. The 15,000 residents were mainly custodians or watchmen in buildings treasured by the Empire for their past or present significance. A million people daily, however, crowd in and out of this area on business.

From the Inns of Court and Fleet Street in the west to the Tower of London in the east, from London Bridge north to Clerkenwell Road, the City boundaries take in an irregular semicircle that has been acclaimed the most important commercial square mile in the world.

#### No Royal Residence Allowed Within City's Bounds

That exclusive "Old Lady of Threadneedle Street" sits in the midst of it: the Bank of England, a private institution which since 1694 has had the exclusive right to issue England's paper money and to hold the reserve funds of all other banks in the country. A coin's throw to the east stands the Stock Exchange (illustration, next page). Lloyd's of London, a short walk east on Leadenhall Street, in 250 years has grown to be the world's largest insurance institution. Within the area also are the famous old financial house of Rothschild and Child's Bank, called Tellson's Bank in Dickens' *Tale of Two Cities*.

The volume of news dispatched from newspaper offices of Fleet Street in normal times makes this a world center for journalism as well as finance.

Within the vast city of London, whose eight million people have spread their buildings over 692 square miles, the City is a tight little center packed inside ancient boundaries like an English walnut in its shell. Through twenty centuries it has preserved its identity and practically its original limits, thanks to the thick wall 35 feet high built around it by Roman conquerors. Remnants of this frequently rebuilt wall and its nine gates are responsible for the names of such streets as London Wall, Newgate, Aldgate, and Cripplegate, as well as Billingsgate Market. The wall enabled City dwellers to hold off William the Conqueror, who prudently built his Tower of London just outside. Since then, no sovereign has lived within the City. The King today first receives permission from the Lord Mayor of London before passing the spots, such as Temple Bar, where modern streets cross the City's antique boundaries.

#### Shakespeare's Twelfth Night and Wren's Dozens of Churches

This same square mile of London's inner core was the birthplace of John Milton, Sir Thomas More, Charles Lamb, and William Penn. There at 17 Gough

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Numerous irreplaceable pictures of now-vanished landmarks, of both historic and literary importance, in the bomb-torn and burned areas of London have been published in recent issues of the *National Geographic Magazine*. A selected list of these issues appears at the end of this Bulletin.

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Bukovina became a part of the Ukrainian Soviet Republic, and Bessarabia was set up as the Moldavian Soviet Republic (the 13th republic), with its capital at Kishinev. Lithuania, Latvia, and Estonia, by votes of new cabinets which were strongly Russian in sympathy, asked to be incorporated into the U. S. S. R. They were admitted early in August as the 14th, 15th, and 16th Soviet Republics, by vote of the Supreme Council.

Bulgaria and Hungary also benefited by land gains from Romania. During August Romania agreed to cede to Bulgaria all of southern Dobruja, thus restoring the Bulgarian border of 1912; and on August 30, as a result of the Vienna Agreement between the Axis powers, Romania turned over to Hungary half of Transylvania, which had been severed from the latter country by the Treaty of Trianon in 1919. Romania lost 41,300 square miles and 6,500,000 inhabitants.

Unoccupied France established, under General Pétain as Chief of State, a "corporative state" form of government, with its capital moved to Vichy from Paris (illustration, inside cover). This marked the end of the 3rd French Republic. A new constitution was adopted abolishing city and town elections (for towns over 2,000) and providing that mayors and municipal councilors be appointed by the central government. Members of the national legislature also were to be appointed, not elected. All political parties were abolished.

The French provinces of Alsace and Lorraine along the German frontier were entrusted to Nazi administrators who launched a program to "Germanize" them. Seventy thousand Lorrainers were evicted to unoccupied France, and on November 30, Germany decreed that Lorraine had been reincorporated into the Reich. Combined with the Saar region, it was to be known as Westmark.

#### **Italian Progress in Two Somaliland Colonies, Losses in Libia**

After France's capitulation it was agreed in armistice terms that Italy should occupy a border strip of France two miles wide, extending along the Franco-Italian frontier through the Alps from Switzerland to the Mediterranean. Italy was to receive full rights to the French colonial port of Djibouti, capital of French Somaliland and only rail link with the interior of Italian East Africa.

On August 19, Great Britain abandoned British Somaliland to an Italian invading force after a conflict of less than two weeks. At the end of the year British troops in conflict with Italian forces had occupied a portion of eastern Libia along the Mediterranean coast west to Bardia.

After being attacked by Italians on Greek soil on October 28, the Greeks pushed the invaders out of their country, and by the end of December Greece held more than one-fourth of Albania. On December 19 a decree was issued providing for the restoration of Albanian law in Greek-occupied Albania.

The International Zone of Tangier on Africa's northwest coast, occupied by Spanish troops in June, was formally placed under Spanish rule in November.

In the Far East the Japanese-Chinese "incident" went into its fourth year on July 7. On March 30, the "puppet" government of Wang Ching-wei, a former premier of China, had been established in Japanese-occupied China, with its capital at Nanking. This government dominated the entire coastline of China, including all of the important seaports, and controlled the main lines of communications. The refugee government of Chiang Kai-shek remained in Chungking.

In the summer of 1940 Japan became a totalitarian state when Prince Fumimaro Konoye set up a one-party Fascist form of government.

In compliance with Japanese demands, in the summer of 1940 Great Britain withdrew her troops from Shanghai (illustration, cover).

After the fall of France in June, Japan made demands on Indo-China for naval and air bases and the right of passage of troops, and an agreement was reached between the two on September 23, at which time Japanese troops crossed the border at Dong Dang into Indo-China. Severe fighting, termed a "border incident," broke out between the two countries, continuing through the year's end.

The 14th Dalai Lama of Tibet, the 6-year-old Chinese boy selected in 1939, was enthroned on February 22 as civil and religious ruler of Tibet at Lhasa.

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### What Is an Earthquake? New England Demonstrates

THE vanished Ice Age may have caused New England's mild earthquake last December, scientists are now suggesting. The tremors which shook down chimneys, ruined eggs in incubators, and made ski-excursion trains a few minutes late had their epicenter at Center Ossipee, New Hampshire, and gave the region its worst quake since 1755. This subterranean shaking-down has now been called a part of the earth's delayed recovery from the weight of now-melted Ice Age glaciers, thousands of feet thick, which blanketed the northern United States.

The name, "earthquake," applies theoretically, at least, to any vibrational shock transmitted through the earth's crust—from the quivering caused by a heavy truck or freight train to the terrifying upheavals which make mountains collapse, open gaping earth crevices, and send 50-foot "tidal" waves to devastate coastal lowlands.

#### Waves in Rock Cause Earth To Quake

While many mysteries are unsolved, seismology (scientific study of earthquakes) has discovered numerous important facts about earthquake behavior. An earthquake may cause the surface of the earth to move up and down, or from side to side, or in a combination of both motions. Waves in the earth coming to the surface cause these movements. Some of these direct waves are like the waves that run along a rope fixed at one end when the other end is shaken vigorously up and down; others act crosswise like the waves in a flapping flag; still others ebb and flow like sound waves or the motion in a long coiled spring suspended with a weight bobbing at its end. In addition many waves have twists about imaginary pivot lines in all three dimensions. When these subterranean waves reach the earth's surface, they set up still other disturbances like ripples that travel outward in expanding circles.

Earthquakes originate in the crust of the earth at depths sometimes as great as 500 miles. From a subterranean point of origin called the earthquake's "focus," the various waves spread out in all directions. But, because of the different textures of the rock materials through which they pass, the waves do not move at an equal rate of speed in every direction. The dense core of the earth, about 4,000 miles in diameter, consists of some unknown material which transmits earthquake waves, but at the same time deflects and slows them down.

#### An Earthquake Gives Short, Hard Punches

The surface area directly above the earthquake focus, where the waves from the disturbance first make themselves felt, is the "epicenter" of the quake. The first pulsing waves alternately push up the surface of the earth around the epicenter and everything on it, and let them fall back. This is done very rapidly, and though the actual rise and fall may be only a fraction of an inch on rocky surfaces or a very few inches on soft soil, the violence of the bouncing may be sufficient to shake down buildings.

The "sidewise" jolts from below follow almost immediately after the first pulsing waves, and the two, perhaps with "twisting waves" as well, then operate together, jerking the earth for tiny distances in every direction.

Heaviest vibrations on the world's seismographs (instruments for recording earthquake vibrations) are registered by the undulatory surface waves, like ripples on a pond, which travel outward in widening circles from the epicenter.

Square Dr. Samuel Johnson wrote his epochal dictionary of the English language.

A few blocks south, within the high paneled walls of Middle Temple Hall, on February 2, 1602, a troupe of actors presented a comedy by one of their company, named Shakespeare; it was *Twelfth Night*, destined for Broadway in 1941.

A physician at old St. Bartholomew's Hospital, to the north, discovered the circulation of the blood—William Harvey. Meanwhile, in the 15th century Guildhall, successive Lord Mayors were annually elected and banqueted under the traditional but mysterious figures of Gog and Magog.

John Bunyan, William Blake, and Daniel Defoe wandered through the City to a common burial place on its northern fringes. Other tombs in the district include those of John Wesley, the Methodist founding father, and George Fox, first Quaker.

Americans in the City visit the small Lady Chapel used as a print shop when Benjamin Franklin worked there, the "Bluecoat" school attended by Baden-Powell, founder of the Boy Scouts, and the tomb of Captain John Smith.

Both traffic and tradition center of the City is St. Paul's Cathedral, "the Empire's parish church," designed by Christopher Wren. Other churches rebuilt by Wren after the Great Fire of 1666 leveled most of the City are numerous enough to need "last" names: St. Mary-le-Bow, St. Andrew by the Wardrobe, St. Mary Aldermary, St. Michael Paternoster Royal (where Lord Mayor Dick Whittington is buried).

Names of the knotted streets of the City are almost unbelievably quaint: Stew Lane, Friday Street, Budge Row, Knightrider Street, Red Lion Court, Fetter Lane, Seething Lane, and Mincing Lane.

Note: See also "Along London's Coronation Route," *National Geographic Magazine*, May, 1937; "As London Toils and Spins," January, 1937; "Shadowy London by Night," August, 1935; and "Some Forgotten Corners of London," February, 1932.

Color pictures of London before bombardment are included in The Society's series of separate color sheets, available in packets of 48 or 96 sheets, at 30c and 50c a packet respectively. A list of this series will be sent upon request.



Photograph from Topical Press

#### THROGMORTON IS LONDON'S WALL STREET

The Stock Exchange, behind the Bank of England, fills the triangle between Threadneedle and Throgmorton Streets, which, with Lombard Street, form the "Wall Street" district of London. Dealing in government bonds of its own and foreign countries, it sets the financial pace of the world. Because London time is five hours ahead of New York's, after the Exchange's official closing, members adjourn to the street for further trading in American securities.

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### War Targets in Italy: Industrial Turin and Frequented Naples

#### Busy, Industrial Turin Hit in Bombing Raids

**T**URIN (Torino), reported bombed by R. A. F. raiders, is Italy's fifth city in size, with a normal population of well over 600,000 people. It is the "Detroit" of Italy, the nation's chief center for the manufacture of automobiles and motors.

Less than 50 miles from the Alpine frontier of France, Turin lies at the hub of communication lines leading across the Alps from Italy's peninsula to western Europe. Although dangerously exposed to attack from the west, Turin's situation at a convergence of international roads has contributed an outstanding economic advantage in time of peace. Turin is therefore not only a strong military base but also one of Italy's chief industrial centers. From its plants comes an extraordinary variety of manufactures, from vermouth, chocolate, and caramels normally sold in luxury markets around the world to the famous Fiat motor cars (illustration, next page), armored military equipment, trucks, railway stock, and aviation motors. Doubtless it was the factories producing motors and military supplies that were the targets for British bombs.

In Turin is a national museum dedicated to automobile and airplane motors alone, with models produced from the earliest period of Italian aviation and including several motors which carried Italian heroes on historic flights. This museum contains an example of the old Model-T Ford, as produced in American factories from 1907 to 1928.

Turin also has a university dating from 1405, an Academy of Science, an important military school, and one of Europe's most extensive libraries.

It owes its modern appearance in large part to the rectangular regularity of its streets and squares, a heritage from ancient times when this city was the Roman *Augusta Taurinorum*.

Once the capital of Sardinia (a kingdom that included much more than the island of that name), and later the first capital of the United Kingdom of Italy, Turin is the seat of an archbishop and contains the residences of most of the Piedmont nobility. Some of its palaces and large squares are considered among the best in Europe. One significant landmark which may serve to guide enemy planes is the new 20-story tower building erected in accordance with the government's desire that every major city have a central structure "typifying the Fascist regime."

#### Ancient Port of Naples Has Unique Appeal for Tourists

**B**RITISH air attacks on Naples (Napoli) have scored direct hits on one of southern Italy's most important communication centers, the city normally handling more tonnage than any other Italian port. In addition to its own historic and geographic attractions, including the beautiful Bay of Naples, it attracts visitors as the port for Pompeii, 16 miles distant, for Herculaneum, and the Isle of Capri.

Naples has a population of 875,000 but has few subways to serve as air-raid shelters. The surrounding hills, which hold the city in their amphitheater, have necessitated some tunneling which may protect many thousand Neapolitans.

Only in recent years has this commercial center turned to industrial development. Much coal has been imported for this purpose, and also there is considerable water power nearby which has attracted some industries. In addition to motor works, the city is engaged in processing food products.

Bulletin No. 5, January 20, 1941 (over).

What starts the waves that cause an earthquake? Explanations involve whole theories propounded to account for the present appearance of the earth's surface, with its yet unexplained distribution of miles-deep oceans, vast plains and high plateaus, and towering mountain ranges. Earthquakes are most numerous in the areas of the globe which are, geologically speaking, "young," where volcanic and earth-moving activity shows that comparatively rapid reshaping of the earth's surface is still going on. Of the two bands of greatest earthquake activity, one runs from the Mediterranean basin across Asia Minor and the Himalayas to the East Indies, and the other comprises the areas bordering the Pacific Ocean on west, north, and east.

It is believed that because of the slow contraction or shrinking which may result from the cooling of the earth's surface, or because of pressure from deposited silt, strains are set up below the surface like those in a stick being bent. If the stick is bent far enough it cracks. When the rock in the earth's crust cracks and breaks, and the two blocks move separately, a "fault," or crack, is formed. The commonest source of earthquakes is believed to be the motion of huge masses of rock in forming or extending faults.

Although breaks are credited with causing most earthquakes, the effects of subterranean blows and explosions are additional causes. For example, hold an iron bar by one end and strike the other sharply with a hammer; the vibrations carried to your hand may be violent enough to produce a stinging feeling. The collapse of roofs of caves, the collision of slipping masses of rock, and the underground movements of volcanic gases and lava are recognized sources of these latter types of earthquakes.

Although up to 100,000 earthquakes are annually recorded on the world's seismographs, few do much damage. It is only when, by bad luck, the destructive force of a major earthquake strikes some heavily populated area that property damage and loss of life are heavy.

**Bulletin No. 4, January 20, 1941.**



*Photograph from Dr. T. A. Jaggard, Jr.*

#### **CRACK-WRITING SCRAWLS THE EARTHQUAKE'S SIGNATURE ACROSS JAPAN**

Major upheavals, like the Japanese earthquake of September, 1923, usually leave visible signs of earth movement. Gaping cracks appear in roads and fields. Railroad tracks may be twisted, highways literally pulled apart, gas mains and petroleum pipelines broken, water mains severed. The Japanese earthquake entirely destroyed Yokohama and ruined 70 per cent of Tokyo, with the loss of 400,000 lives.



Its principal industry, however, has long been the tourist trade. Visitors come to see the 14th century Church of San Lorenzo where Boccaccio saw the woman whom he immortalized as Fiammetta. In the adjoining monastery Petrarch long resided. Giordano Bruno, the 16th century martyred philosopher, and St. Thomas Aquinas also lived in monasteries there. At Naples the poet Vergil was buried. Tasso grew up in Naples and there wrote part of "Jerusalem Delivered."

In all, Naples has some 300 churches and chapels. The particular appeal to tourists of the centuries-old churches is their wealth of statuary and paintings, murals and other art treasures. Not all of them have been preserved. Frescoes ascribed to Giotto in the six-century-old church of Santa Chiara were finally whitewashed to brighten the church interior.

The city is the seat of the University of Naples, founded in 1224, which normally enrolls 10,000 students.

Possibly the greatest attraction in the city is the National Museum, unique as the repository of relics from near-by Pompeii. It contains ancient frescoes and paintings, bronzes and marbles, gems, vases, and other ancient treasure from the mansions of Pompeian wealth. Rooms containing more than 2,000 Latin inscriptions attract scholars. Of more popular interest are the 80 wooden tables containing contracts and collections of a Pompeian money lender, accounts brought to an end by the eruption of Vesuvius in 79 A. D.

Note: Additional photographs of Naples and Turin are to be found in "Italy, from Roman Ruins to Radio," *National Geographic Magazine*, March, 1940; "Sojourning in the Italy of Today," September, 1936; "Hunting Castles in Italy," September, 1935; "Neapolitan Blues and Imperial Purple of Roman Italy" (color insert), August, 1934; and "The Perennial Geographer" (Vergil), October, 1930.

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Photograph by John Patric

#### TURIN SHOWS TWO TRANSPORTATION TRICKS TO SOLVE GASOLINE PROBLEMS

Italy's pressing need for petroleum calls for speed in distribution. When oil tank cars must be transferred from one railroad to another, motor-proud Turin provides heavy trucks and trailers, on which the tank cars are loaded for quick highway short cuts. To cut down on automobile consumption of gasoline, Turin makes "half-pint" models of a Fiat car which have performance records of many miles per gallon (right). The name of the Agrarian Association on the warehouse (right background) indicates Turin's geographic location—Piedmont, the ancient principality at the "foot of the mountains," the Alps.



